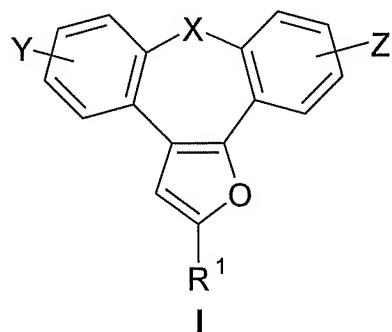


Claims:

Please amend the claims as follows:

1. (Currently Amended) A method of treating a disease, damage or disorder selected from depression, bipolar disorder, addiction, and stroke of the central nervous system associated with a disorder of neurochemical equilibrium of a biogenic amine or other neurotransmitter, comprising administering to a subject in need thereof a compound of formula I

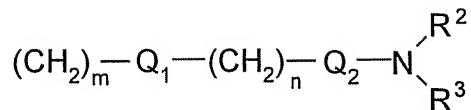


X is selected from the group consisting of CH₂, O, S, S(=O), and S(=O)₂ and NR^a, wherein R^a is selected from the group consisting of hydrogen, C₁-C₃-alkyl, C₄-C₃-alkanoyl, C₄-C₇-alkyloxycarbonyl, C₇-C₁₀-arylalkyloxycarbonyl, C₇-C₁₀-areoyl, C₇-C₁₀-arylalkyl, C₃-C₇-alkylsilyl and C₅-C₁₀-alkylsilylalkyloxyalkyl;

Y and Z are each independently selected from the group consisting of hydrogen, halogen, C₁-C₄-alkyl, C₂-C₄-alkenyl, C₂-C₄-alkynyl, halo-C₁-C₄-alkyl, hydroxy, C₁-C₄-alkoxy, trifluoromethoxy, C₁-C₄-alkanoyl, amino, amino-C₁-C₄-alkyl, C₁-C₄-alkylamino, N-(C₁-C₄-alkyl)amino, N,N-di(C₁-C₄-alkyl)amino, thiol, C₁-C₄-alkylthio, sulfonyl, C₁-C₄-alkylsulfonyl, sulfinyl, C₁-C₄-alkylsulfinyl, carboxy, C₁-C₄-alkoxycarbonyl, cyano and nitro;

R¹ is CHO, C₁-C₇-alkyl optionally substituted with one or more substituents selected from the group consisting of halogen, hydroxy, C₁-C₄ alkoxy, thiol, C₁-C₄ alkylthio, amino, N-(C₁-C₄) alkylamino, N,N-di(C₁-C₄-alkyl)-amino, sulfonyl, C₁-C₄ alkylsulfonyl, sulfinyl and C₁-C₄ alkylsulfinyl;

or a substituent of the formula II:



II

wherein

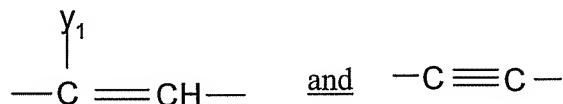
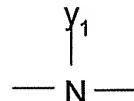
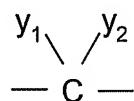
R^2 and R^3 are each independently hydrogen, C₁-C₄-alkyl, or aryl, or

R^2 and R^3 taken together with the nitrogen atom to which they are attached form a heterocycle or heteroaryl group, optionally substituted with one or two substituents selected from the group consisting of halogen, C₁-C₄ alkyl, cyano, nitro, hydroxy, C₁-C₄ alkoxy, thiol, C₁-C₄ alkylthio, amino, N-(C₁-C₄) alkylamino, N,N-di(C₁-C₄-alkyl)-amino, sulfonyl, C₁-C₄ alkylsulfonyl, sulfinyl, and C₁-C₄ alkylsulfinyl;

m is an integer from 1 to 3;

n is an integer from 0 to 3;

Q_1 and Q_2 are each independently selected from the group consisting of oxygen, sulfur



wherein substituents

y_1 and y_2 are each independently selected from the group consisting of hydrogen, halogen, C₁-C₄-alkyl optionally substituted with one or more substituents selected from the group consisting of halogen, hydroxy, C₁-C₄ alkoxy, thiol, C₁-C₄ alkylthio, amino, N-(C₁-C₄) alkylamino, N,N-di(C₁-C₄-alkyl)-amino, sulfonyl, C₁-C₄ alkylsulfonyl, sulfinyl and C₁-C₄ alkylsulfinyl; aryl optionally substituted with one or two substituents

selected from the group consisting of halogen, C₁-C₄ alkyl, cyano, nitro, hydroxy, C₁-C₄ alkoxy, thiol, C₁-C₄ alkylthio, amino, N-(C₁-C₄) alkylamino, N,N-di(C₁-C₄-alkyl)-amino, sulfonyl, C₁-C₄ alkylsulfonyl, sulfinyl, and C₁-C₄ alkylsulfinyl; hydroxy, C₁-C₄-alkoxy, C₁-C₄-alkanoyl, thiol, C₁-C₄-alkylthio, sulfonyl, C₁-C₄-alkylsulfonyl, sulfinyl, C₁-C₄-alkylsulfinyl, cyano, and nitro, or

y₁ and y₂ together with the carbon atom to which they are attached form a carbonyl group or an imino group;
and a pharmaceutically acceptable salt or solvate thereof.

2. (Previously Presented) The method of claim 1, wherein the biogenic amine is serotonin, norepinephrine or dopamine.

3. (Previously Presented) The method of claim 1, wherein the neurotransmitter is glutamate.

4. (Previously Presented) The method of claim 1 wherein the compound of formula I regulates the synthesis, storage, release, metabolism, reabsorption or receptor binding of a biogenic amine or neurotransmitter.

5. (Previously Presented) The method of claim 4, wherein the compound of formula I binds to a receptor of a biogenic amine.

6. (Previously Presented) The method of claim 5, wherein the compound of formula I binds to a serotonin 5-HT_{2A} or 5-HT_{2C} receptor.

7. (Previously Presented) The method of claim 6, wherein the compound of formula I binds to a serotonin 5-HT_{2A} or 5-HT_{2C} receptor with an IC₅₀ of less than 1μM.

8. (Previously Presented) The method of claim 1, wherein the compound of formula I binds to a σ1 receptor with an IC₅₀ of less than 1 μM.

9. (Previously Presented) The method of claim 1, wherein the compound of formula I binds to a σ_1 receptor and to at least one serotonin receptor selected from 5-HT_{2A} and 5-HT_{2C}.

10. (Canceled).

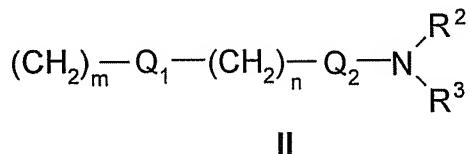
11. (Canceled).

12. (Currently Amended) The method of claim 1 wherein X is O or [.,.] S, or NR^a, wherein R^a is selected from the group consisting of hydrogen, C₁-C₃-alkyl, C₁-C₃-alkanoyl, C₇-C₁₀-aroyl and C₇-C₁₀-arylalkyl.

13. (Previously Presented) The method of claim 1, wherein Y and Z are each independently selected from the group consisting of hydrogen, fluorine, chlorine, bromine, C₁-C₄-alkyl, halo-C₁-C₄-alkyl, hydroxy, C₁-C₄-alkoxy, trifluoromethoxy, C₁-C₄-alkanoyl, amino, amino-C₁-C₄-alkyl, N-(C₁-C₄-alkyl)amino, N,N-di(C₁-C₄-alkyl)amino, thiol, C₁-C₄-alkylthio, cyano and nitro.

14. (Previously Presented) The method of claim 1, wherein R¹ is CHO, C₁-C₇-alkyl optionally substituted with one or more substituents selected from the group consisting of halogen, hydroxy, C₁-C₄ alkoxy, thiol, C₁-C₄ alkylthio, amino, N-(C₁-C₄) alkylamino and N,N-di(C₁-C₄-alkyl)-amino;

or a substituent of the formula II:



wherein

R² and R³ are each independently hydrogen, C₁-C₄-alkyl, or aryl; or

R^2 and R^3 taken together with the nitrogen atom to which they are attached form a heterocycle or heteroaryl group selected from the group consisting of morpholine-4-yl, piperidine-1-yl, pyrrolidine-1-yl, imidazole-1-yl and piperazine-1-yl;

m is an integer from 1 to 3;

n is an integer from 0 to 3; and

Q_1 and Q_2 are each independently oxygen or CH_2 .

15. (Currently Amended) The method of claim 1, wherein the compound of formula I is selected from the group consisting of:

2-methyl-1,8-dioxa-dibenzo[e,h]azulene;

11-[[m]]chloro-2-methyl-1,8-dioxa-dibenzo[e,h]azulene;

1,8-dioxa-dibenzo[e,h]azulene-2-carbaldehyde;

11-chloro-1,8-dioxa-dibenzo[e,h]azulene-2-carbaldehyde;

(1,8-dioxa-dibenzo[e,h]azulen-2-yl)-methanol;

(11-chloro-1,8-dioxa-dibenzo[e,h]azulen-2-yl)-methanol,

[3-(1,8-dioxa-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-dimethyl-

amine:

[2-(11-chloro-1,8-dioxa-dibenzo[e,h]azulen-2-ylmethoxy)-ethyl]-dimethyl-amine;

[3-(11-chloro-1,8-dioxa-dibenzo[e,h]azulen-2-ylmethoxy)-propyl]-dimethyl-amine;

3-(11-chloro-1,8-dioxa-dibenzo[e,h]azulen-2-ylmethoxy)-propylamine; and

a pharmaceutically acceptable salt or solvate thereof.